## Enrichment of regulatory requirements



#### Veronika Heimsbakk

Managing AI Engineer at Capgemini Norway



#### Enrichment of regulatory requirements

Veronika Heimsbakk

- > kake
- > kaffe

# hei

## The project



Creating a insight portal connecting all regulatory requirements together by legal scopes across all regulations maintained by the Norwegian Maritime Authority.



2nd OTTR User Forum | Enrichment of regulatory requirements

#### **Regulatory requirement**

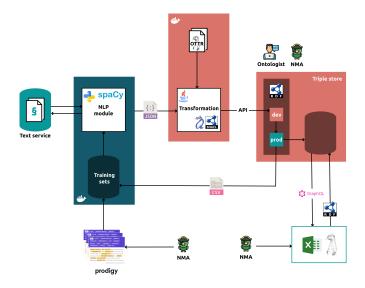
```
sdir:REG1404S21
a sh:NodeShape, sdir:Requirement ;
rdfs:label "Materials in pipelines, etc."@en ;
sh:property scope:BuiltDate_a19880102,
scope:FishingVessel,
scope:MaxLOA_15 ;
sdir:eliReference "/regulations/.../1404/.../21"^^xsd:anyURI ;
sdir:regulationReference "https://lovdata.no/.../§21"^^xsd:anyURI ;
sdir:theme "Fire, machinery and electric installations"@en .
```

## **Risk value attributes**

| iri               | text                | iri+                |   | iri+  | x   | sd:date               | xsd:string+       | xsd:bool  | ean |
|-------------------|---------------------|---------------------|---|---|-----|-----------------------|-------------------|-----------|-----|
| Krav              | 💌 Label (engelsk) 💌 | Virkeområde         | Ŧ | Risiko                                      | Y T | id for verifikasjon 🔽 | Sjekkpunkter      | 💌 Kritisk | *   |
| sdir:REG0515S11P2 | Toilet@@en          | scope:PS_GT_max3000 |   | sdir:CapsizingMaintain   sdir:CrushMaintain | 1   | 992-01-01             | kake   kaffe   is | TRUE      |     |

| Risk                  | URI stating what machine learning model to run          |
|-----------------------|---|
| Time for verification | xsd:date  |
| Check points          | one or more string values with inspector's descriptions |
| Critical              | boolean stating critical status                         |

## Workflow



2nd OTTR User Forum | Enrichment of regulatory requirements

## Templates

- > SHACL
- > NMA Requirement & NMA Scope
- > Risk values

#### Our wishes for OTTR

- > Java API
- > JSON-support
- > Nested instances